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AIP report MANPOWER STATISTICS DIVISION

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ENROLLMENTS AND DEGREES

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For over two decades physics departments have contributed their enrollment and degree data to this annual survey, which has the distinction of summarizing information from nearly 100% of the 747 degree-granting physics departments in the U.S. In the mid 1970's, degree-granting astronomy departments were added to this survey, and their data are shown on the last two pages of this report.

Table I classifies institutions according to the highest physics degree granted and presents recent yearly changes in those numbers of institutions. Fluctuations occur more frequently in the number of master's degree programs because they include institutions that have either very few, or no, graduate students enrolled but whose administrations have been in favor of keeping a master's degree program on the books. The gradual decline in the number of bachelor's-granting institutions is primarily the result of colleges which terminate their undergraduate physics degree programs. Former master's programs and new physics degree programs offset this decline to make it more gradual.

By making a distinction between a terminal master's degree and one granted enroute to a higher physics degree, we are able to present four trends in degree production in **Figure I**. Of these, the bachelor's degrees show the greatest change: a 5% increase. Doctorates increased by only 1%, and both types of master's degrees declined.

Table I. Institutions by highest physics degree offered, 1978–1984.

Academic year	Doctorate granting	Master's granting	Bachelor's granting
1978–79	170*	104	502
1979–80	169*	96	501
1980–81	168*	103	492
1981–82	167**	104	485
1982–83	163**	95	488
1983–84	164**	91	492

Five of these institutions have two physics doctorate-granting departments; the second one is generally an applied physics department. They are Stanford U., U. of CA-Davis, U. of CA-San Diego, Harvard U., and Cornell U.

***Four of these institutions have two physics doctorate-granting departments. They are Stanford U., U. of CA-Davis, Harvard U., and Cornell U.*

Fig. I. Physics degrees awarded by academic year, 1972–83

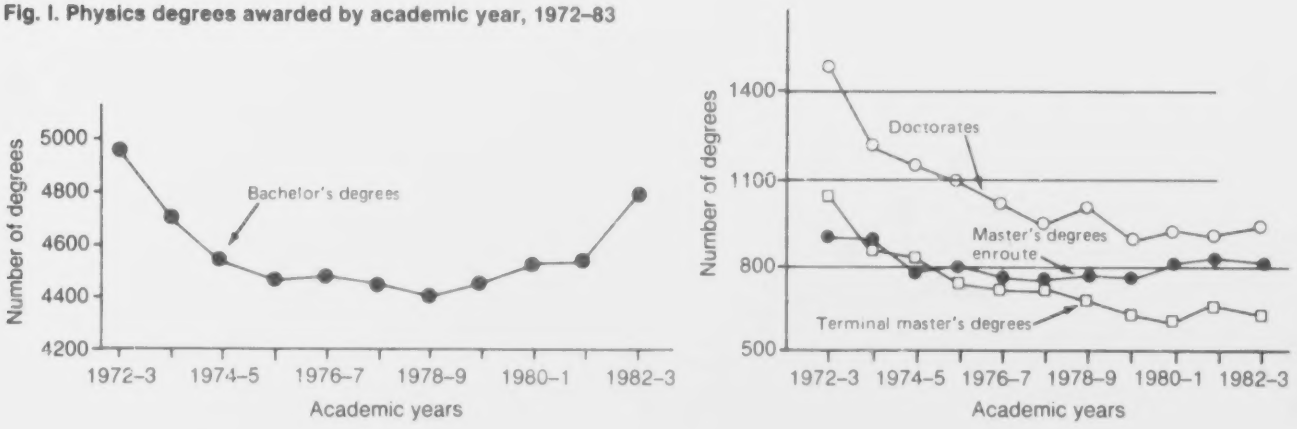

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Table II. Physics enrollments and degrees awarded by academic year 1972–1984

Academic year	Number of physics degrees granted (July 1 to June 30) Bachelor's	Master's	Doctor's	Undergraduate physics-major enrollment Juniors	Seniors	Graduate physics-student enrollment* Total	1st year
1972–73	4923	1961	1445	6012	5806	11 804	2904
1973–74	4652	1772	1236	5858	5108†	11 119	2680
1974–75	4571	1650	1167	5660	4803†	10 410	2668
1975–76	4487	1570	1111	5888	4922†	10 372	2646
1976–77	4517	1469	1051	5711	4930†	9 991	2624
1977–78	4457	1422	971	5820	4975††	9 835	2499
1978–79	4416	1428	1033	5835	4964	9 813	2458
1979–80	4440	1370	912	5696	4942	9 647	2439
1980–81	4513	1387	927	5905	5091	9 934	2564
1981–82	4558	1476	912	6386	5372	10 173	2637
1982–83	4795	1426	921	6299	5580	10 429	2630
1983–84				6303	5658	10 922	2855

*Includes part-time students.
†This total has been adjusted by 500 students who were seniors for more than one year.
††This total has been adjusted by 300 students who were seniors for more than one year.

Table III. Undergraduate and graduate enrollments and degrees by institution type, 1972–1984

Academic year	Number of physics degrees granted (July 1 to June 30) Bachelor's	Master's	Doctor's	Undergraduate physics-major enrollment Juniors	Seniors	Graduate physics-student enrollment* Total	1st year
Doctorate granting institutions							
1972–73	2265	1484	1445	2787	2717	10 227	2177
1973–74	2155	1387	1236	2844	2484	9 759	2169
1974–75	2191	1318	1167	2780	2420	9 295	2205
1975–76	2182	1249	1111	2983	2505	9 241	2163
1976–77	2184	1186	1051	2862	2502	8 867	2182
1977–78	2218	1164	971	2851	2590	8 852	2138
1978–79	2158	1183	1033	2937	2579	8 864	2107
1979–80	2142	1151	912	2696	2491	8 744	2072
1980–81	2123	1161	927	2765	2568	9 062	2223
1981–82	2179	1281	912	2996	2671	9 273	2275
1982–83	2192	1210	921	2962	2645	9 524	2288
1983–84				2955	2824	10 006	2495
Master's granting institutions							
1972–73	820	477		1145	1086	1577	727
1973–74	810	385		939	893	1360	511
1974–75	699	332		881	741	1115	463
1975–76	604	321		916	811	1131	483
1976–77	658	283		840	761	1078	442
1977–78	590	258		832	752	983	361
1978–79	541	245		795	694	949	351
1979–80	585	219		705	650	903	367
1980–81	589	226		868	655	872	341
1981–82	532	195		917	734	900	362
1982–83	554	216		877	752	905	342
1983–84				830	722	916	360
Bachelor's granting institutions							
1972–73	1838			2080	2003		
1973–74	1687			2075	1731		
1974–75	1681			1999	1748		
1975–76	1701			1989	1606		
1976–77	1675			2009	1667		
1977–78	1649			2137	1633		
1978–79	1717			2103	1691		
1979–80	1713			2295	1801		
1980–81	1801			2272	1868		
1981–82	1847			2473	1967		
1982–83	2049			2460	2183		
1983–84				2518	2112		

Table IV. Introductory physics enrollments in physics-degree-granting institutions by geographic region 1979–1984

Geographic region†	1979–80	1980–81	1981–82	1982–83	1983–84
New England	18 797	21 766	20 228	19 124	19 147
Mid Atlantic	41 555	43 216	41 879	45 236	49 788
E. N. Central	50 843	54 663	54 430	54 410	57 721
W. N. Central	21 805	23 406	23 420	25 776	25 820
S. Atlantic	33 966	33 800	36 544	36 750	40 668
E. S. Central	14 829	15 068	16 276	14 712	15 820
W. S. Central	28 563	30 030	28 188	28 980	32 337
Mountain	20 753	21 035	23 408	25 966	27 532
Pacific	31 318	36 150	34 656	36 076	36 214
Total	262 429	279 134	279 029	287 030	305 047

†New England–Conn., Me., Mass., N. Hamp., R.I., Vt.; Middle Atlantic–N.J., N.Y., Pa.; East North Central–Ill., Ind., Mich., Ohio, Wisc., West North Central–Iowa, Kansas, Minn., Mo., Nebr., N. Dak., S. Dak.; South Atlantic–Del., D.C., Fla., Ga., Md., N.C., S.C., Va., W. Va.; East South Central–Ala., Ky., Miss., Tenn.; West South Central–Ark., La., Okla., Tex.; Mountain–Ariz., Colo., Idaho, Mont., Nev., N. Mex., Utah, Wyo.; Pacific–Alas., Cal., Hawaii, Oreg., Wash.

The data on which **Figure I** is based are presented in **Table II** together with undergraduate and graduate enrollment trends. The number of undergraduate physics majors shows little change in the most recent year, whereas first-year graduate students increased significantly (8.6%); this increase is reflected in the total graduate enrollment, up almost 5%.

A closer examination of the enrollment and degree data shown in **Table II** is presented in **Table III**, which reveals the distribution of students and graduates for each of the three types of institutions. Although the total number of 1982–83 bachelor's degrees reported by the doctorate-granting and bachelor's-granting institutions are very similar, the number of degrees per institution is more than three times as large for the PhD-granting universities as it is for the four-year colleges. The increasing graduate enrollment mentioned in connection with **Table II** is largely attributable to the doctorate-granting institutions while the master's institutions show only modest gains. Undergraduate physics majors at the master's institutions appear to have declined somewhat.

Thus the first three tables and **Figure I** of this report present an overview of physics enrollment and degree trends, allowing **Tables IV** through **XI** to focus on more detailed analyses of the pipeline, and **Tables XII** and **XIII** to present the corresponding astronomy data.

Introductory physics enrollments

Since physics is not widely incorporated into the basic secondary school curricula in the U.S., many students encounter this discipline for the first time as freshmen in college, where physics is frequently a science requirement. **Tables IV** and **V** focus on the distribution of introductory physics enrollments in the physics-degree-granting institutions. However, the 300,000 introductory physics students do not include any students who take introductory physics at the approximately one thousand colleges and universities whose physics programs do not lead to a bachelor's degree.

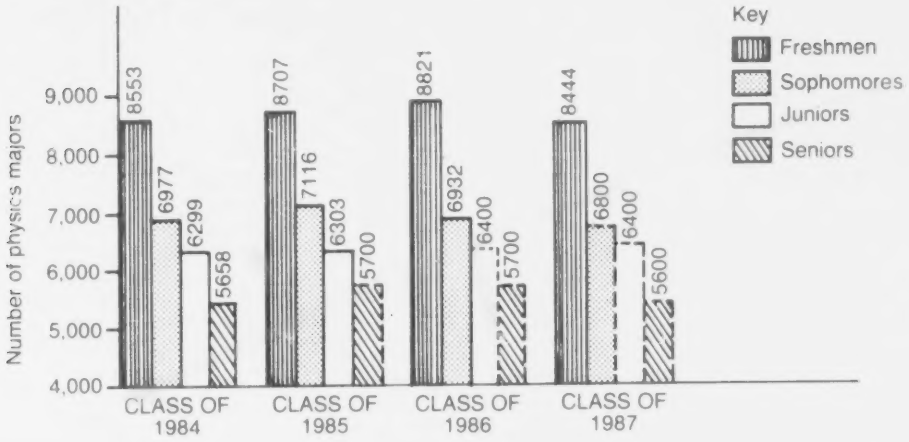
By dividing the U.S. into nine geographic regions, one can observe enrollment trends which increased steadily during the past five years in all regions with the exception of New England and the East South Central. A more detailed analysis of the 1983–84 enrollment is presented in **Table V** and shows how small a proportion the physical science majors comprise. Over 40% of the students taking introductory physics are potential engineering majors, while the pre-med students as well as other health-related majors comprise more than one-quarter of the current enrollment. The distribution of students shown in **Table V** is very similar to that of the previous year.

Table V. Introductory physics enrollments, 1983–84.

Enrollment in introductory physics courses designed for:	Institution type* I N	I %	II N	II %	III N	III %	Total N	Total %
engineering majors	27 381	35.2	17 712	38.2	80 678	44.6	125 771	41.2
physical science majors	14 313	18.4	7 650	16.5	25 506	14.1	47 469	15.6
biology, health-related majors	23 336	30.0	11 592	25.0	47 032	26.0	81 960	26.9
other	12 757	16.4	9 413	20.3	27 677	15.3	49 847	16.3
Total introductory enrollment N	77 787		46 367		180 893		305 047	
%		25.5		15.2		59.3		100%

*"Institution type" indicates the highest degree offered; type I = bachelor's degree, type II = master's degree, type III = doctorate.

Fig. II. Actual and projected number of undergraduate physics majors



Note: Each cluster of bars shown in Figure II depict the freshmen, sophomores, juniors, and seniors of four successive graduating classes. The most recent estimate of freshman physics majors is 8444 and refers to September 1983. Based on the attrition of earlier classes 5600 of them are expected to become senior physics majors in 1986–87 and are presented above as the "class of 1987."

Undergraduate physics majors

At most institutions students are not required to declare their majors until the beginning of the junior year. However, taking into account the requirements for a physics bachelor's degree, the great majority of physics department chairpersons can estimate the numbers of freshmen and sophomores who are likely to be physics majors in their departments. The attrition rates between freshmen and seniors have been monitored closely, making it possible to project classes of senior physics majors until 1987. Thus the first set of bars in **Figure II** follows the 1980–81 freshman physics majors through four years of undergraduate study to become the graduating class of 1984. Last September's estimate of freshman physics majors indicated a 4% decline from the previous year, and is projected to yield 5600 seniors who will become the class of 1987.

Concentrating on the 1983–84 undergraduate physics majors, **Table VI** offers a detailed distribution of them both geographically and by type of degree-granting institution. The last column of this table, "Fifth-year undergraduates", consists of over 500 students who need an additional summer or term to complete their degree requirements; in some cases transfers from junior colleges cause such a delay. Thus, by separating those 582 seniors from the others, physics majors at each level are counted only once. The overall attrition between freshman and senior level is approximately 35% as indicated in **Figure II**. Using the totals for seniors listed in the lower portion of **Table VI** and comparing them with the corresponding freshman physics majors of 1980–81, we find a 25% attrition at the doctorate-granting institutions, a 40% attrition at the master's-granting institutions and a 45% attrition at the four-year colleges.

Table VI. Undergraduate physics majors by geographic region and type of institution, 1983–84.

Geographic region*	Estimated** no. of freshmen	Estimated** no. of sophomores	Number of juniors	Number of seniors	Fifth-year undergraduates
New England	733	663	605	619	23
Mid Atlantic	1 552	1 207	1 062	878	66
E. N. Central	1 309	1 039	951	867	67
W. N. Central	734	592	506	454	36
S. Atlantic	1 342	1 090	839	735	79
E. S. Central	337	307	281	211	42
W. S. Central	644	583	469	467	62
Mountain	532	455	409	468	45
Pacific	1 261	996	1 181	959	162
Total	8 444	6 932	6 303	5 658	582
Doctorate-granting inst.	3 891	3 067	2 955	2 824	273
Master's-granting inst.	1 043	891	830	722	123
Bachelor's-granting inst.	3 510	2 974	2 518	2 112	186

** See Table IV for explanation of geographic region.*
***Estimates of potential physics majors made by the physics department chairpersons.*

Graduate enrollment

In 1980 the total graduate physics enrollment reversed its ten-year decline and resumed an upward trend. However, the major contributors to this trend reversal were foreign students who entered the U.S. in increasing numbers to study physics. **Table VII** presents the details of this trend and shows a significant change for the most recent year. In 1983–84 the U.S. component of the first-year graduate enrollment increased by almost 12%. Foreign first-year graduate students continued to increase but at a rate slower than the one observed since the late 1970's.

Table VIII focuses on the total graduate physics student population and presents their study status. As is evident from the trends in that table, master's institutions have always enrolled a large proportion of part-time graduate students, whereas at doctoral departments part-time students have comprised less than 10% since 1975–76.

The major reason for such a large proportion of full-time graduate physics students is the availability of financial support for them. There are more assistantships for first-year graduate physics students than there are students to fill them. This favorable situation is described in **Table IX** which presents the distribution of unfilled assistantships by geographic region for both types of graduate physics departments as recorded in September 1983. A comparison of this situation with the previous year singles out two regions in which the number of unfilled assistantships at the PhD-granting institutions have greatly increased; they are the South Atlantic and the West-South-Central regions. On the other hand, unfilled assistantships at the master's institutions declined to half of what they numbered in the previous year.

Table VII. Trend in entering U.S. and foreign graduate physics students, 1974–1984.

Academic year	No. of first-year graduate students U.S.	Foreign	Total	% foreign students of total
1974–75	2074	594	2668	22.3
1975–76	2095	551	2646	20.8
1976–77	1987	637	2624	24.2
1977–78	1851	648	2499	26.0
1978–79	1840	618	2458	25.2
1979–80	1700	739	2439	30.3
1980–81	1720	844	2564	32.9
1981–82	1654	983	2637	37.3
1982–83	1576	1054	2630	40.1
1983–84	1763	1092	2855	38.2

Table VIII. Full-time and part-time graduate physics enrollment by type of institution, 1974–1984.

Academic year	Total number of graduate students Institution type* II Full-time	Part-time	Sub-total	III Full-time	Part-time	Sub-total	Total
1974–75	623	492	1115	8326	969	9295	10 410
1975–76	628	503	1131	8439	802	9241	10 372
1976–77	576	507	1083	8119	789	8908	9 991
1977–78	546	437	983	8174	678	8852	9 835
1978–79	468	481	949	8185	679	8864	9 813
1979–80	550	353	903	8059	685	8744	9 647
1980–81	484	388	872	8302	760	9062	9 934
1981–82	543	357	900	8555	718	9273	10 173
1982–83	566	339	905	8712	812	9524	10 429
1983–84	569	347	916	9285	721	10006	10 922

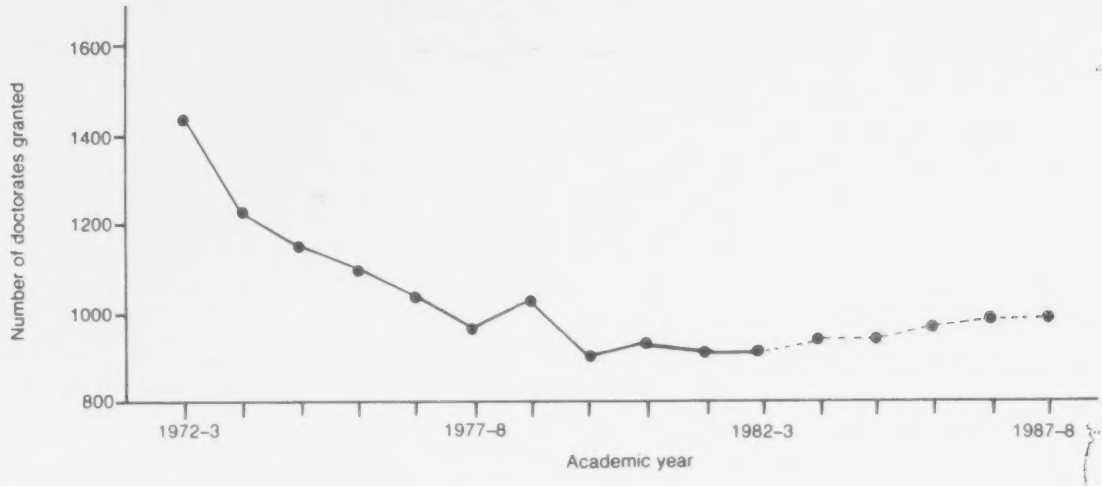
**Institution type indicates the highest physics degree offered: type II = master's degree, type III = doctorate.*

Table IX. Unfilled assistantships for first-year graduate physics students, September 1983.

Geographic region*	Doctoral departments with 0 unfilled assistantships	1–2	3–5	>6	No. of unfilled ass'tships	No. of 1st yr. grad. students	Master's-granting depts. with 0 unfilled assistantships	1–2	3–5	No. of unfilled ass'tships	No. of 1st yr. grad. students
New England	16	3	0	1	16	308	4	0	0	0	12
Mid Atlantic	27	2	1	0	6	468	2	1	0	1	10
E. N. Central	19	2	0	0	3	452	19	4	0	6	103
W. N. Central	9	3	0	0	4	121	9	3	1	9	42
S. Atlantic	20	2	4	1	35	270	9	0	2	6	36
E. S. Central	8	1	0	1	9	59	3	3	0	3	35
W. S. Central	9	4	1	1	31	169	6	2	0	3	59
Mountain	11	1	2	1	26	207	3	0	0	0	14
Pacific	17	0	2	1	15	441	4	2	2	6	49
Total	136	18	10	6	145	2 495	59	15	5	34	360

**See Table IV for explanation of geographic region.*

Fig. III. Actual and projected number of physics doctorates granted, 1972–1988



The median number of years of graduate study required to complete a physics doctorate has hardly changed in over a decade. It is between five and six years and has a range from three to more than ten years. The high correlation between the first-year graduate students at PhD-granting institutions and the number of doctorates granted five years later is the basis for our projection presented in **Figure III**. In recent years, between 42% and 45% of a given year's entering graduate students complete their doctorates five years later. Since the rapid increase in foreign graduate students began less than five years ago, it is still not known what possible changes may occur in the attrition rate or to what extent the median number of years of graduate study required to complete the PhD will change. Therefore the expected number of physics doctorates to be conferred during the mid to late 1980's remains in the range of 950 to 1000 per year.

Degrees granted

What is summarized in three rows of **Table III** is presented in greater detail in **Table X**. This table compares the contributions that three types of institutions make to the production of new physicists. Each year the smallest group of graduates is the one from master's institutions that grant master's degrees enroute to higher physics degrees. These graduates subsequently change schools. Terminal master's degrees are primarily granted by the PhD institutions rather than the master's institutions, and **Table X** indicates a 3:1 ratio for that degree production. Another detail shown in **Table X** is the geographic distribution of all the physics degrees granted in 1982–83. Here we find that in New England and the western part of the U.S., four-year colleges make a much smaller contribution to the production of physics bachelors than the same type of institution makes in the Midwest or the South Atlantic. The geographic distribution of doctorates granted in 1982–83 represents a shift away from New England and toward the mountain and Pacific regions.

Table X. Physics degrees by type of institution and geographic region, 1982–83.

	Bachelor's degrees			Master's degrees		Terminal master's degrees		Doctorates
Geographic region*	Institution type** I	II	III	Institution type** II	III	Institution type** II	III	Institution type** III
New England	158	29	362	8	96	4	43	117
Mid. Atlantic	455	19	386	1	166	5	60	187
E. N. Central	313	168	296	17	158	41	119	171
W. N. Central	203	71	106	10	30	24	21	43
S. Atlantic	312	46	248	7	68	17	72	111
E. S. Central	98	57	72	4	8	17	12	17
W. S. Central	143	77	139	6	27	26	36	50
Mountain	81	9	190	2	44	3	39	52
Pacific	286	78	393	5	144	19	67	173
Subtotal	2 049	554	2 192	60	741	156	469	921
				801		625		
Total		4 795			1 426			921

**See Table IV for explanation of geographic region.*

***Institution type indicates the highest physics degree offered: type I = bachelor's degree, type II = master's degree, type III = doctorate.*

Table XI. Number of physics degrees granted by sex and minority group* status, 1982–83.

Type of degree	Sex	Total no. of degrees	Black	Am. Ind.	Puerto Rican	Mex. Am.	Hispanic	Oriental	Asian Ind.	Arab	Total minorities
Bachelor's	Men	4253	96	1	7	12	33	86	24	46	305
	Women	542	20	–	1	4	9	30	5	4	73
	Total	4795	116	1	8	16	42	116	29	50	378
Master's enroute	Men	734	13	–	–	–	12	92	20	14	151
	Women	67	1	–	–	–	1	12	6	3	23
	Total	801	14	–	–	–	13	104	26	17	174
Terminal master's	Men	561	9	–	–	1	5	28	4	6	53
	Women	64	4	–	–	–	1	4	3	2	14
	Total	625	13	–	–	1	6	32	7	8	67
Doctorate	Men	853	17	3	–	1	16	65	30	20	152
	Women	68	–	–	–	–	1	6	8	–	15
	Total	921	17	3	–	1	17	71	38	20	167

**Minorities in AIP surveys are defined as groups with a low representation in the physics community, but ones whose participation has aroused considerable interest.*

Closely tied to the data we collect and analyze on foreign student enrollment in physics programs are our data on minority groups because a majority of the members are foreign citizens. We therefore define minority groups as those who have a small but noted representation among the physics degree recipients; hence it appeared appropriate to include women in **Table XI**, which focuses on physics degree recipients for the most recent academic year, 1982–83, irrespective of citizenship. The sources for this information are: (1) a report of women and minority degree recipients from physics department chairpersons, and (2) identification with minority groups by individual graduates. The second source forms part of two student surveys* conducted annually by AIP.

The exceptionally high response rate to this survey, mentioned at the beginning of this report, does not include the questions requesting minority data. For that reason one needs to view the number of minority degree recipients at all levels as lower limits. However, it should be noted that the totals in the last column of **Table XI** are greater than those of the previous year; that is especially true of the master's degrees enroute to doctorates, which doubled.

**"Survey of Physics and Astronomy Bachelor's Degree Recipients" AIP Pub. No. R-211.14.*
"Graudate Student Survey" AIP Pub. No. R-207.15

ASTRONOMY

As mentioned at the beginning of this report, the annual Survey of Enrollments and Degrees was expanded to include astronomy data in the mid-1970's but limited itself to the degree-granting astronomy departments, of which there are approximately 70. Thirty of them are combined physics and astronomy departments where difficulties of definition can arise when astronomy students are granted physics degrees and subsequently affect trend data.

The information presented in **Table XII** is similar in format to the physics data presented in **Table II**. The decrease in bachelor's degrees may be real or it may simply reflect 20 or 30 double majors who were included among the physics majors. The fluctuations in first-year graduate enrollment may also be attributable to the definitional problems mentioned earlier.

Table XII. Trend in astronomy enrollments and degrees, 1975–1984

Academic year	No. of astronomy degrees granted (July 1–June 30)				Undergraduate astronomy major enrollment		Graduate astronomy enrollment	
	Bachelor's	Master's enroute	Terminal master's	Doctor's	Juniors	Seniors	Total	1st year
1975–76	172	56	35	93	305	280	780	165
1976–77	184	58	35	96	290	270	790	170
1977–78	177	64	31	93	295	270	803	171
1978–79	165	42	42	90	270	249	710	145
1979–80	165	27	27	106	262	242	698	154
1980–81	156	34	24	82	275	238	686	164
1981–82	181	54	15	70	252	224	647	142
1982–83	138	61	22	81	274	232	670	178
1983–84					242	217	688	154

Table XIII. Astronomy* enrollments 1983–84 and degrees 1982–83 by type of institution**

		Type I	Type II	Type III	Total
Astronomy departments	Combined	17	2	11	30
	Separate	5	3	30	38
	Total	22	5	41	68
Astronomy degrees	Bachelor's	36	6	96	138
	Master's enroute	–	3	58	61
	Terminal master's	–	3	19	22
	Doctor's	–	–	81	81
Astronomy enrollments	Introd. courses for science majors	498	68	2 779	3 345
	Introd. courses for nonscie. majors	5 746	1 711	33 772	41 229
	Introd. astronomy courses offered in physics departments	–	–	–	58 930
	Total introductory enrollments				103 504
	Junior astronomy majors	51	19	172	242
	Senior astronomy majors	45	17	155	217
	First-year graduate students	–	9	145	154
	Total graduate enrollment	–	18	670	688

**This survey includes only degree-granting astronomy departments.*

***"Institution type" indicates the highest astronomy degree offered; type I = bachelor's degree, type II = master's degree, type III = doctorate.*

While there are comparatively few institutions that offer an astronomy major, introductory astronomy courses are a popular science requirement, and are offered in both physics and astronomy departments as shown in **Table XIII**. For purposes of comparison with physics the 68 astronomy departments are divided into three groups on the basis of highest astronomy degree offered and their enrollments and degrees classified accordingly.

Additional publications available from the Manpower Statistics Division are:

Graduate Student Survey
Employment Survey
Survey of Physics and Astronomy Bachelor's Degree Recipients

AIP report MANPOWER STATISTICS DIVISION

American Institute of Physics, 335 East 45 Street, New York, N.Y. 10017 (212) 661-9404

DATA ON PHYSICS ENROLLMENTS AND DEGREES

a SUPPLEMENT

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SUPPLEMENT

The detailed data from the annual Survey of Enrollments and Degrees are presented in this supplement. The 1982–1983 physics degrees and the 1983–84 physics enrollments are listed for each physics degree-granting college or university in the United States. Institutions are listed alphabetically by state. The data shown for each institution consist of undergraduate physics majors, full-time and part-time graduate students, first-year graduate students included in that total, and physics degrees granted at all levels. All freshman and sophomore enrollments are estimated by the department chairmen. Numbers shown in brackets are estimates based on data supplied by that institution in an earlier year.

*** Institution grants master's degree as its highest physics degree.**

**** Institution grants doctorate as its highest physics degree.**

1 No undergraduate degree program in physics

MEMBER SOCIETIES
AMERICAN PHYSICAL SOCIETY • OPTICAL SOCIETY OF AMERICA • ACOUSTICAL SOCIETY OF AMERICA • SOCIETY OF RHEOLOGY • AMERICAN ASSOCIATION OF PHYSICS TEACHERS • AMERICAN CRYSTALLOGRAPHIC ASSOCIATION • AMERICAN ASTRONOMICAL SOCIETY • AMERICAN ASSOCIATION OF PHYSICISTS IN MEDICINE • AMERICAN VACUUM SOCIETY

Institution	1983-84 PHYSICS ENROLLMENTS Undergraduate physics majors Fresh-men	Sopho-mores	Jr's	Sr's	Graduate students f-time & p-time Total	1st yr.	1982-83 PHYSICS DEGREES Bach.	MS	TMS	PhD
ALABAMA										
*AL A & M U.	(8)	(4)	(10)	(6)	(15)	(8)	(4)	(-)	(2)	
AL State U.	3	3	3	1			0			
**AL-U. of-Birmingham	3	2	?	?	18	5	3	0	0	2
**AL-U. of-Huntsville	7	6	13	9	44	9	5	1	0	2
**AL-U.of-University	6	6	6	5	15	2	3	1	0	2
**Auburn U.	15	8	6	13	27	16	11	1	2	1
Birmingham-Southern Col.	3	2	2	1			5			
Jacksonville State U.	2	2	1	0			2			
North AL-U. of	2	3	3	2			7			
Samford U.	0	1	0	1			2			
South AL-U. of	5	5	3	1			0			
Stillman Col.	0	4	4	4			2			
Talladega Col.	15	15	4	1			1			
Tuskegee Institute	2	4	6	4			7			
ALASKA										
** AK-U.of	6	4	6	3	20	4	1	3	4	0
ARIZONA										
**AZ State U.	10	21	20	37	59	20	12	1	3	3
**AZ-U. of	17	18	20	33	88	29	16	11	3	5
Northern AZ U.	10	10	8	6			5			
ARKANSAS										
AR State U.	4	4	2	4			6			
**AR-U. of-Fayetteville	6	4	1	10	29	4	10	2	2	1
AR-U. of-Little Rock	10	12	12	10			2			
AR-U. of-Monticello	2	1	1	2			2			
AR-U. of-Pine Bluff	5	4	4	2			4			
Central AR-U. of	4	12	5	5			5			
Harding U.	3	2	0	0			0			
Henderson State U.	5	6	5	3			3			
Hendrix Col.	12	8	5	2			2			
Ouachita Baptist U.	2	3	2	3			6			
Southern AR U.	10	5	2	2			1			
CALIFORNIA										
**CA Institute of Tech.	(50)	47	43	43	131	35	27	10	-	23
CA Polytechnic State U.	24	14	24	25			10			
CA State Col.-Bakersfield	5	5	6	1			2			
CA State Col.-San Bern.	5	5	6	5			3			
CA State Col.-Stanislaus	6	5	6	8			3			
CA State Poly U.-Pomona	30	20	37	22			6			

Institution	1983-84 PHYSICS ENROLLMENTS Undergraduate physics majors Fresh-men	Sopho-mores	Jr's	Sr's	Graduate students f-time & p-time Total	1st yr.	1982-83 PHYSICS DEGREES Bach.	MS	TMS	PhD
CALIFORNIA (cont'd)										
CA State U.-Chico	3	4	4	6			4			
CA State U.-Dom. Hills	(8)	(8)	(6)	(4)			(4)			
*CA State U.-Fresno	19	9	10	13	9	3	5	1	-	
CA State U.-Fullerton	12	9	14	30			22			
CA State U.-Hayward	14	7	11	13			13			
*CA State U.-Long Beach	18	16	18	16	25	11	12	-	6	
*CA State U.-Los Angeles	4	3	6	7	9	2	1	3	-	
*CA State U.-Northridge	28	32	57	55	26	8	13	-	6	
CA State U.-Sacramento	12	8	13	14			3			
**CA-U. of Berkeley	80	80	62	79	248	39	90	23	-	36
**CA-U. of-Davis (Physics)	112	38	77	28	46	12	15	-	2	6
1**CA-U. of-Davis (Applied)	-	-	-	-	72	16	-	6	1	9
**CA-U. of-Irvine	90	95	58	51	70	17	18	6	4	5
**CA-U. of-Los Angeles	45	15	72	29	211	57	41	14	4	22
**CA-U. of-Riverside	14	11	21	21	48	10	10	4	2	5
**CA-U. of-San Diego	47	52	57	40	104	20	32	12	1	7
**CA-U. of-Santa Barbara	62	40	35	25	90	24	21	5	10	5
**CA-U. of-Santa Cruz	28	26	48	30	23	4	20	0	1	3
Claremont McKenna, Pitzer & Scripps Cols.	2	2	2	2			2			
Harvey Mudd Col.	20	25	26	16			24			
Humboldt State U.	4	8	11	11			12			
La Verne U. of	2	2	1	2			1			
Loma Linda U.	4	3	3	4			4			
Loyola Marymount U.	6	4	0	2			2			
1**Naval Postgraduate School	-	-	-	-	52	28	-	-	17	-
Occidental Col.	25	15	15	11			6			
Pacific Union Col.	6	8	4	2			7			
*Pacific-U. of	5	1	5	4	3		0			
Point Loma Col.	10	3	4	1			7			
Pomona Col.	8	9	12	12			10			
Redlands-U. of	2	2	1	1			1			
*San Diego State U.	15	10	30	15	25	8	14	1	2	
San Diego-U. of	2	3	1	1			1			
*San Francisco State U.	25	20	15	13	45	9	12	-	4	
San Francisco-U. of	(5)	(5)	(4)	(4)			(4)			
*San Jose State U.	30	20	47	40	26	8	17	-	1	
Santa Clara-U. of	8	8	5	5			12			
Sonoma State U.	20	10	20	20			16			
**Southern CA-U. of	21	3	19	6	42	15	3	7	1	2
**Stanford U. (Physics)	25	25	19	27	129	26	12	11	3	13
1**Stanford U. (Applied)	-	-	-	-	124	18	-	24	3	17
Whittier Col.	4	3	0	1			3			

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COLORADO										
CO Col.	6	6	6	6			7			
**CO School of Mines	24	21	16	13	20	3	14	0	1	0
**CO State U.	39	50	34	33	29	10	19	3	5	4
**CO-U. of-Boulder	114	72	60	95	129	40	41	11	3	10
CO-U. of-Denver	13	16	7	13			2			
**Denver-U. of	4	3	8	5	20	7	3	1	2	2
Metropolitan State Col.	4	6	5	5			2			
Northern CO-U. of	17	2	2	6			2			
Regis Col.	0	0	0	0			0			
Southern CO-U. of	5	4	7	10			4			
U.S. Air Force Academy	4	10	28	15			30			
Western State Col. of CO	4	4	4	0			6			
CONNECTICUT										
*Bridgeport-U. of	5	5	8	5	6	1	3	0	2	
*Central CT State Col.	8	-	11	3	0	0	3	0	0	
CT Col.	3	3	5	1			3			
**CT-U. of	32	18	22	12	73	12	11	12	1	5
Fairfield U.	1	3	5	6			5			
Hartford-U. of	(3)	(2)	(2)	(2)			(2)			
New Haven-U. of	3	4	2	0			0			
Southern CT State Col.	18	6	8	5			2			
Trinity Col.	(4)	(4)	4	5			5			
**Wesleyan U.	20	20	17	8	8	3	7	0	1	0
**Yale U.	28	26	16	15	112	24	19	20	1	15
DELAWARE										
DE State Col.	12	11	8	7			3			
**DE-U. of	17	19	14	13	41	7	7	3	3	2
DISTRICT OF COLUMBIA										
**American U.	5	2	6	7	25	7	2	0	1	1
**Catholic U.	6	4	3	3	43	14	3	5	3	8
DC-U. of	9	8	6	3			0			
Gallaudet Col.	(3)	(3)	(2)	(2)			(2)			
*George Washington U.	6	5	3	3	5	2	3	0	0	0
*Georgetown U.	14	12	13	9	20	5	8	4	3	2
*Howard U.	21	6	3	1	26	2	0	2	0	1
FLORIDA										
Central FL-U. of	10	10	9	8			6			
FL A & M U.	(4)	(4)	(5)	(4)			(4)			
*FL Atlantic U.	0	4	3	2	7	1	1	0	2	
*FL Institute of Tech.	10	7	4	5	16	7	1	3	1	
*FL International U.	4	5	5	4	1	0	5	0	0	

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FLORIDA (cont'd)										
**FL State U.	19	24	31	29	54	8	6	2	2	4
**FL-U. of	28	22	33	29	48	8	7	1	5	1
Jacksonville U.	(5)	(5)	(10)	(18)			(8)			
**Miami-U. of	6	5	4	5	16	4	5	3	1	1
New Col. of U. of South FL	5	5	5	1			2			
Rollins Col.	5	5	1	4			4			
**South FL-U. of	11	11	14	8	22	6	7	3	3	0
Stetson U.	5	4	4	5			5			
West FL-U. of	(3)	(3)	10	8			7			
GEORGIA										
Agnes Scott Col.	2	2	2	1			0			
1*Atlanta U.	-	-	-	-	9	2	-	1	1	
Augusta Col.	5	3	4	4			2			
Berry Col.	3	1	0	2			2			
Clark Col.	60	35	24	12			4			
**Emory U.	3	5	8	5	9	3	7	0	1	0
**GA Institute of Tech.	30	35	26	52	58	15	38	6	13	9
GA Southern Col.	(4)	(4)	(3)	(3)			(5)			
*GA State U.	13	17	8	5	18	8	4	3	2	
**GA-U. of	(10)	(8)	7	5	24	5	3	0	2	4
Mercer U.	2	2	1	2			4			
Morehouse Col.	(10)	(9)	(8)	(8)			(6)			
North GA Col.	25	15	12	5			11			
Valdosta State Col.	9	10	5	5			7			
West GA Col.	10	6	5	4			2			
HAWAII										
HI-U. of-Hilo	1	2	0	0			0			
**HI-U. of-Honolulu	20	10	16	13	23	3	5	3	1	2
IDAHO										
Boise State U.	6	6	4	7			3			
*ID State U.	8	10	8	3	12	9	5	0	2	
**ID-U. of	8	8	7	8	9	2	7	0	2	1
Northwest Nazarene Col.	12	5	6	12			6			
ILLINOIS										
Augustana Col.	10	10	6	13			14			
Bradley U.	(4)	(4)	(3)	(2)			(2)			
**Chicago-U. of	40	30	36	20	134	30	18	11	1	10
*DePaul U.	5	5	2	2	18	3	3	0	2	
Eastern IL U.	7	8	4	10			7			
Elmhurst Col.	6	5	4	6			5			

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ILLINOIS (cont'd)										
Eureka Col.	(2)	(2)	(1)	(1)			(2)			
Greenville Col.	4	2	2	0			6			
IL Benedictine Col.	4	4	4	2			3			
IL Col.	0	0	0	1			2			
**IL Institute of Tech	14	17	10	6	20	8	3	6	1	2
IL State U.	55	45	24	11			6			
**IL-U.of Chicago Circle	22	20	21	25	62	16	7	4	5	3
**IL-U.of Urbana	52	33	63	63	283	66	46	40	10	29
IL Wesleyan U.	19	9	5	3			3			
Knox Col.	(3)	2	4	3			2			
Lake Forest Col.	6	5	7	4			5			
Lewis U.	1	5	3	2			2			
Loyola U. of Chicago	35	8	6	9			6			
MacMurray Col.	(1)	(1)	(1)	(1)			(2)			
Millikin U.	0	0	3	0			0			
Monmouth Col.	5	7	1	1			2			
North Central Col.	2	2	1	3			6			
North Park Col.	0	1	3	0			2			
*Northeastern IL U.	14	14	5	3	12	5	3		3	
*Northern IL U.	25	20	20	9	21	8	10	4	2	
**Northwestern U.	24	11	5	15	58	19	13	4	1	8
Olivet Nazarene	8	5	4	2			0			
Principia Col.	2	2	3	3			2			
Roosevelt U.	(4)	(3)	(3)	(2)			(3)			
*Southern IL U.-Carbondale	9	9	9	10	35	9	12		5	
*Southern IL U.-Edwardsville	3	4	4	4	7	5	5		5	
*Western IL U.	14	3	5	0	7	3	5		2	
Wheaton Col.	15	17	8	4			1			
INDIANA										
Anderson Col.	3	3	3	3			1			
*Ball State U.	20	20	8	6	12	6	5	0	0	
Butler U.	10	4	9	7			4			
DePauw U.	8	3	7	1			2			
Earlham Col.	(8)	(8)	(6)	(4)			(4)			
Evansville - U. of	3	2	3	3			0			
Franklin Col. of IN	1	1	1	0			1			
Goshen Col.	(5)	(5)	(3)	(3)			(4)			
Grace Col.	1	2	2	0			2			
Hanover Col.	2	3	3	5			3			
IN Central U.	(3)	(1)	(2)	(2)			(1)			
*IN State U.	10	8	7	9	7	1	7		2	
**IN U. -Bloomington	10	16	16	9	87	26	18	6	1	10
IN U.-Purdue U.-Fort Wayne	6	3	2	3						
IN U.-Purdue U.-Indiana.	6	5	6	1			4			
IN U.-South Bend	5	5	2	2			2			

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INDIANA (cont'd)										
Manchester Col.	(2)	(1)	(1)	(2)			(0)			
**Notre Dame-U. of	19	5	12	12	61	13	14	0	1	4
Purdue U.-Calumet Cps.	3	3	4	4			2			
**Purdue U.-W. Lafayette	40	25	19	24	135	29	19	13	7	16
Rose-Hulman Inst. of Tech	18	4	6	4			3			
Taylor U.	3	1	4	1			5			
Valparaiso U.	4	12	3	4			9			
Wabash Col.	10	6	5	3			3			
IOWA										
Central Col.	7	3	1	2			3			
Coe Col.	5	5	3	2			6			
Cornell Col.	3	1	3	3			0			
Dordt Col.	2	0	0	0			0			
*Drake U.	14	3	4	7	4	2	3	0	0	
Dubuque-U. of	0	0	0	0			0			
Grinnell Col.	20	15	9	10			10			
**IA State U.	28	10	18	25	79	23	17	0	7	13
**IA-U. of	19	15	27	20	48	17	7	9	0	3
Loras Col.	4	6	6	5			2			
Luther Col.	14	12	8	6			8			
Maharishi Inter. U.	(8)	(8)	(4)	(4)			(5)			
Morningside Col.	2	2	0	0			0			
*Northern IA-U. of	(7)	(7)	(7)	(10)	(3)	(1)	(6)	(0)	(1)	
St. Ambrose Col.	0	0	3	2			1			
Wartburg Col.	1	2	3	3			3			
KANSAS										
Baker U.	2	1	1	2			2			
Benedictine Col.	6	7	3	2			1			
Bethel Col.	3	3	2	2			2			
*Emporia State U.	2	2	2	7	3	0	6	0	1	
*Fort Hays State U.	8	4	5	2	1	1	6	0	3	
**KS State U.	14	8	8	10	29	12	9	2	0	2
**KS-U. of	25	18	10	8	39	9	8	1	3	3
KS Wesleyan U.	(1)	(1)	(2)	(1)			(0)			
Mid-America Nazarene Col.	4	4	3	3			3			
*Pittsburg State U.	1	3	2	4	5	5	3	1	1	
Washburn U.	4	2	3	1			1			
*Wichita State U.	3	3	4	3	11	4	2	3	6	
KENTUCKY										
Berea Col.	5	3	5	6			3			
Centre Col. of KY	10	7	7	4			3			
*Eastern KY U.	3	3	11	3	2	2	5	0	1	
Georgetown Col.	(2)	(2)	(2)	(1)			(2)			
**KY-U. of	32	22	18	14	35	8	15	3	5	1

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KENTUCKY (cont'd)										
KY Wesleyan Col.	2	1	0	2			3			
*Louisville - U. of	6	5	6	6	11	8	2	4	2	1
Morehead State U.	4	2	2	1			0			
*Murray State U.	46	67	44	17	7	3	31		7	
Northern KY U.	(4)	(3)	(2)	(1)			(3)			
Thomas More Col.	6	4	5	6			8			
Transylvania U.	5	1	0	1			0			
Western KY U.	15	5	11	10			4			
LOUISIANA										
Centenary Col.	5	5	4	1			1			
Dillard U.	(8)	(8)	(6)	(5)			(3)			
Grambling State U.	10	8	4	3			3			
**LA State U.-Baton Rouge	12	10	7	8	40	7	9		3	4
LA State U.-Shreveport	8	5	0	5			0			
*LA Tech U.	4	2	2	1	8	3	4	-	0	
Loyola U.	20	15	13	4			6			
McNeese State U.	(3)	(3)	(1)	(1)			(1)			
*New Orleans - U. of	17	8	6	7	27	12	3		3	
*Northeast LA U.	3	3	2	2	8	1	0	0	0	
Northwestern State U.	3	1	1	0			0			
Southeastern LA U.	5	4	0	0			4			
Southern U. - Baton Rouge	3	6	0	0			4			
Southern U. - New Orleans	10	15	12	10			0			
*Southwestern LA - U.of	4	2	0	3	5	2	2	-	0	
**Tulane U.	10	10	6	6	10	4	4	-	5	1
Xavier U.	0	0	1	3			4			
MAINE										
Bates Col.	15	10	5	12			14			
Bowdoin Col.	12	12	14	14			15			
Colby Col.	8	7	3	7			8			
**ME - U. of	20	36	22	27	23	10	6	0	6	1
MARYLAND										
Frostburg State Col.	20	12	3	1			3			
**Johns Hopkins U.	13	17	9	6	82	27	6	12	3	9
Loyola Col.	10	5	1	2			3			
*MD-U.of-Baltimore County	12	12	10	9	6	3	3			
**MD-U.of - College Park	87	48	22	21	205	55	18	8	9	28
Morgan State U.	5	5	5	7			7			
Notre Dame of MD-Col.of	1	3	0	0			0			
Towson State U.	(20)	(20)	(15)	(15)			(5)			
U.S. Naval Academy	26	38	24	26			28			
Washington Col.	2	3	2	0			1			
Western MD Col.	3	1	3	1			0			

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MASSACHUSETTS										
Amherst Col.	(15)	(15)	11	11			13			
**Boston Col.	8	14	6	7	32	10	6	1	1	2
**Boston U.	12	10	14	8	47	12	8	4	3	3
**Brandeis U.	6	10	7	9	49	15	12	2	2	4
Bridgewater State Col.	3	4	5	6			3			
**Clark U.	4	3	4	3	11	4	4	0	1	0
Curry Col.	3	3	4	2			1			
Eastern Nazarene Col.	8	4	7	1			3			
Gordon Col.	5	3	4	3			4			
Hampshire Col.	(4)	(3)	(3)	(3)			(3)			
**Harvard U.-incl.Radcliffe	66	61	54	59	103	23	49	20	2	14
**Harvard U.-(Applied)	65	65	59	51	119	32	46	4	1	10
Holy Cross-Col. of the	(12)	(12)	(14)	(12)			(6)			
**Lowell-U. of	14	16	18	12	32	10	11	0	5	2
**Mass. Inst. of Tech.	80	80	62	120	295	59	70	-	9	43
**MA-U. of-Amherst	25	15	17	15	57	21	33	1	3	6
*MA-U. of-Boston-incl. (Boston State Col.)	10	10	10	14	10	5	10	8	0	
Mount Holyoke Col.	5	5	6	12			9			
North Adams State Col.	2	5	5	4			5			
**Northeastern U.	8	10	6	6	78	29	5	6	0	2
Smith Col.	5	5	4	2			2			
*Southeastern MA U.	(6)	(6)	(5)	(5)	8	4	4			
Suffolk U.	(2)	(2)	(3)	(3)			(2)			
**Tufts U.	6	4	2	9	23	7	8	2	3	2
Wellesley Col.	15	15	11	5			10			
Wheaton Col.	3	3	2	3			2			
Williams Col.	12	12	9	11			16			
**Worcester Polytech.Inst.	16	13	9	11	6	2	11	1	0	0
Worcester State Col.	(3)	(3)	(2)	(2)			(2)			
MICHIGAN										
Adrian Col.	1	1	2	1			0			
Albion Col.	16	10	5	7			7			
Alma Col.	(5)	(5)	(3)	(3)			(3)			
*Andrews U.	5	7	3	1	2	0	6	4	0	
Calvin Col.	5	3	3	3			4			
*Central MI U.	8	3	3	3	3	2	8	0	2	
*Eastern MI U.	(4)	(4)	(4)	(4)	(10)	(5)	5	0	2	
Grand Valley State Col.	2	3	2	1			3			
Hillsdale Col.	1	4	1	2			0			
Hope Col.	10	10	10	5			17			
Kalamazoo Col.	12	12	14	12			11			
Lawrence Inst. of Tech.	15	1	8	7			0			
**MI State U.	15	24	67	31	92	30	12	10	6	7

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MICHIGAN (cont'd)										
*MI Technological U.	25	20	25	14	5	4	9	0	0	
**MI-U. of-Ann Arbor	30	30	30	30	120	35	20	7	10	16
MI-U. of-Dearborn	5	6	8	2			5			
MI-U. of-Flint	10	3	3	5			1			
Northern MI U.	1	3	5	2			4			
**Oakland U.	6	8	6	9	7	1	10	0	10	0
Saginaw Valley State Col.	4	4	4	1			4			
Spring Arbor Col.	0	1	0	0			1			
**Wayne State U.	9	8	6	15	44	8	8	3	4	6
*Western MI U.	10	10	8	10	25	13	9	0	0	
MINNESOTA										
Augsburg Col.	10	6	7	5			2			
Bemidji State U.	15	15	10	6			7			
Bethel Col.	4	2	2	2			4			
Carleton Col.	15	20	16	26			28			
Concordia Col.	(5)	(5)	(4)	(3)			4			
Gustavus Adolphus Col.	30	20	9	5			4			
Hamline U.	15	17	20	12			7			
Macalester Col.	(8)	(8)	(4)	(6)			(0)			
*Mankato State U.	10	10	7	6	6	4	8	0	2	
*MN-U. of-Duluth	12	9	4	0	7	5	7	1	1	
**MN-U. of-Minneapolis	40	36	31	25	119	21	19	1	1	4
MN-U. of-Morris	5	4	3	3			3			
Moorhead State U.	3	3	3	3			1			
St. Catherine-Col. of	2	1	1	0			0			
St. Cloud State U.	5	5	3	3			6			
St. John's U.	29	16	8	10			7			
St. Mary's Col.	6	5	3	2			2			
St. Olaf Col.	35	17	18	16			17			
St. Thomas-Col. of	3	2	1	0			1			
Southwest State U.	(3)	(2)	(2)	(3)			(0)			
Winona State U.	8	5	4	5			4			
MISSISSIPPI										
Jackson State U.	0	1	2	4			3			
Millsaps Col.	2	2	1	2			1			
MS Col.	2	2	2	2			0			
*MS State U.	12	5	4	3	8	5	0	0	2	
**MS-U. of	6	5	15	5	22	7	8	0	1	0
MS Valley State U.	(4)	(4)	(0)	(3)			(0)			
Rust Col.	(2)	(2)	(1)	(1)			(1)			
*Southern MS-U. of	5	5	5	4	9	5	5	0	1	
Tougaloo Col.	(4)	(4)	(4)	(3)			(3)			

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MISSOURI										
Central Methodist Col.	(0)	(0)	(0)	(0)			(0)			
Central MO State U.	28	15	15	7			4			
Drury Col.	2	2	2	2			1			
MO Southern State Col.	2	2	1	2			0			
**MO-U. of-Columbia	13	13	10	4	28	5	9	3	2	5
*MO-U. of-Kansas City	5	5	5	3	21	10	2	3	2	
**MO-U. of-Rolla	9	19	9	11	36	8	7	6	3	0
*MO-U. of-St. Louis	(10)	(10)	20	6	15	4	4	0	3	
Northeast MO State U.	40	30	8	4			2			
Northwest MO State U.	2	4	0	1			0			
Rockhurst Col.	2	1	0	1			1			
**St. Louis U.	0	2	0	2	2	0	2	0	0	1
*Southeast MO State U.	10	12	8	6	2	1	4	0	0	
Southwest MO State U.	0	2	10	3			6			
**Washington U.	22	20	29	20	62	12	18	4	2	6
Westminster Col.	2	2	1	1			1			
William Jewell Col.	(8)	(6)	(5)	(4)			(4)			
William Woods Col.	0	0	0	0			1			
MONTANA										
**MT State U.	19	18	12	23	46	17	11	4	0	2
*MT-U. of	20	8	4	5	3	2	2	2	0	
NEBRASKA										
Chadron State Col.	(3)	(2)	(3)	(3)			(3)			
Concordia Teachers Col.	(5)	(5)	(7)	(5)			(5)			
*Creighton U.	5	5	8	9	8	3	8	0	3	
Hastings Col.	10	6	5	5			4			
Kearney State Col.	(3)	(3)	(2)	(3)			(2)			
**NE-U. of-Lincoln	19	14	9	16	30	9	3	3	3	6
NE-U. of-Omaha	6	5	5	5			1			
NE Wesleyan U.	6	6	6	6			6			
Union Col.	(2)	(0)	(1)	(1)			(0)		-	
Wayne State U.	(2)	(2)	(1)	(1)			(1)			
NEVADA										
*NV-U. of-Las Vegas	(6)	(8)	(5)	(4)	(7)	(3)	(2)	(0)	(1)	
**NV-U. of-Reno	5	5	6	3	15	4	1	1	0	2
NEW HAMPSHIRE										
**Dartmouth Col.	(18)	(15)	27	14	27	2	14	0	1	2
**NH-U. of	14	15	9	19	25	9	9	0	0	0
NEW JERSEY										
Drew U.	3	4	4	1			1			
Fairleigh Dickinson-Madison	(2)	(2)	(1)	(1)			(0)			

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NEW JERSEY (cont'd)										
*Fairleigh Dickinson U.-Teaneck	0	1	3	0	9	4	5	0	0	
Georgian Court Col.	1	1	0	1			2			
Monmouth Col.	5	2	5	4			3			
Montclair State Col.	3	2	6	5			5			
**Princeton U.	150	85	22	14	79	21	21	0	0	16
Ramapo Col.	(5)	(5)	(5)	(3)			(1)			
Rider Col.	1	1	0	0			0			
**Rutgers U.-Busch Campus	(10)	5	26	25	83	18	19	1	5	6
Rutgers U.-Camden Campus	11	16	16	10			5			
Rutgers U.-Newark Campus	2	1	2	7			3			
Saint Peter's Col.	1	0	1	4			3			
Seton Hall U.	4	2	5	2			2			
**Stevens Inst. of Tech.	31	20	29	18	50	5	14	6	4	3
Stockton State Col.	10	7	9	9			12			
Trenton State Col.	8	3	6	7			6			
NEW MEXICO										
Eastern NM U.	3	3	2	2			1			
NM Highlands U.	3	2	3	3			2			
**NM Inst. of Mining & Tech.	42	20	15	15	10	4	6	2	0	0
**NM State U.	7	10	9	9	26	3	3	2	4	5
**NM-U. of	10	8	21	20	60	14	8	4	0	3
NEW YORK										
**Adelphi U.	11	7	5	5	22	8	2	6	0	1
Alfred U.	2	2	2	2			0			
Bard Col.	4	2	3	1			2			
Barnard Col.	3	3	4	2			3			
**Brooklyn Col.	5	5	2	2	30	9	1	2	0	2
C.W. Post Col.	3	2	4	2			1			
Canisius Col.	2	3	3	1			1			
**City Col. of CUNY	7	7	7	5	67	16	2	1	1	10
**Clarkson Col. of Tech.	22	15	18	10	20	5	9	6	0	4
Colgate U.	10	25	21	10			16			
**Columbia U.	35	35	23	28	120	22	25	15	1	15
**Cornell U. (Physics)	(40)	(35)	27	40	175	46	25	24	2	25
**Cornell U. (Applied)	-	-	37	37	76	23	25	17	5	9
Fordham U.	0	0	5	5			5			
Hamilton Col.	5	5	3	6			5			
Hartwick Col.	3	1	2	2			4			
Herbert Lehman Col.	6	5	6	1			2			

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NEW YORK (cont'd)										
Hobart & Wm. Smith Cols.	4	2	2	2			4			
Hofstra U.	2	3	2	1			2			
Houghton Col.	4	3	2	1			5			
*Hunter Col.of the CUNY	3	3	4	4	11	0	2		2	
Iona Col.	8	3	8	1			5			
Ithaca Col.	15	14	4	3			2			
Le Moyne Col.	7	5	2	1			0			
Manhattan Col.	1	3	5	5			2			
NY Institute of Tech.	3	3	4	3			5			
**NYU	10	12	13	11	98	22	7	14	-	3
**Polytechnic Inst.of NY	6	3	1	2	26	6	3	4	1	3
**Queens Col. of the CUNY	6	7	3	6	19	8	7	1	1	3
**Rensselaer Polytech.Inst.	105	56	64	41	76	27	45	2	8	3
Roberts Wesleyan Col.	3	5	2	1			2			
Rochester Inst. of Tech.	23	21	14	10			5			
**Rochester - U. of	30	25	9	13	89	20	14	14	2	7
1**Rockefeller U.	-	-	-	-	8	2	-	-	-	0
*St. Bonaventure U.	6	6	3	2	3	1	3	-	0	
St. John Fisher Col.	5	3	2	1			4			
St. John's U.	2	3	5	5			3			
St. Lawrence U.	5	5	4	2			9			
Siena Col.	14	5	3	5			2			
**SUNY-Albany	20	20	13	15	61	27	22	3	3	10
**SUNY-Binghamton	50	31	24	19	25	11	12	1	3	1
**SUNY-Buffalo	10	6	1	5	59	11	2	2	-	1
**SUNY-Stony Brook	50	50	35	25	131	28	22	7	2	17
SUNY Col.-Brockport	13	8	13	10			7			
SUNY Col.-Buffalo	14	11	9	3			3			
SUNY Col.-Cortland	42	48	32	22			12			
SUNY Col.-Fredonia	3	5	10	10			14			
SUNY Col.-Geneseo	15	10	7	6			9			
*SUNY Col.-New Paltz	15	10	15	10	7	5	6	-	2	
SUNY Col.-Oneonta	14	18	15	16			12			
SUNY Col.-Oswego	20	30	6	6			6			
SUNY Col.-Plattsburgh	4	4	3	3			4			
SUNY Col.-Potsdam	30	30	26	7			10			
Staten Island-Col. of	1	0	1	1			0			
**Syracuse U.	6	4	6	4	57	13	5	1	2	2
Union Col.	6	6	6	4			6			
Utica Col.	0	2	3	3			2			
Vassar Col.	5	6	3	10			8			
Wagner Col.	16	6	6	4			3			
Yeshiva U.	2	2	2	2			2			
York Col. of the CUNY	10	6	5	2			2			

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NORTH CAROLINA										
Appalachian State U.	(12)	(10)	(10)	(10)			11			
Davidson Col.	10	10	7	8			5			
**Duke U.	25	21	19	13	49	12	11	5	1	7
*East Carolina U.	51	49	6	21	8	4	0	2	1	
Elizabeth City State U.	(3)	(3)	(2)	(3)			(1)			
Elon Col.	2	2	1	2			2			
Guilford Col.	15	21	12	4			10			
NC A & T State U.	(3)	(3)	(3)	(2)			(1)			
NC Central U.	18	10	5	0			1			
**NC State U.	19	18	19	12	52	13	12	1	4	7
NC-U. of-Asheville	5	5	5	10			4			
**NC-U. of-Chapel Hill	29	26	19	19	61	13	22	0	3	4
NC-U. of-Charlotte	(10)	(8)	(7)	(7)			(4)			
*NC-U. of-Greensboro	10	5	6	10	3	1	8	0	4	
NC-U. of-Wilmington	10	10	9	5			7			
Pfeiffer Col.	0	1	0	0			0			
*Wake Forest U.	40	25	16	10	5	2	10	0	3	
Warren Wilson Col.	11	5	1	5			5			
Western Carolina U.	2	4	7	5			3			
NORTH DAKOTA										
Minot State Col.	2	1	0	1			2			
**ND State U.	5	4	7	5	8	3	0		0	0
**ND-U. of	5	6	2	6	7	2	2	0	0	0
OHIO										
1**Air Force Inst. of Tech.	-	-	-	-	89	42	-	1	26	2
*Akron-U. of	8	8	15	10	26	6	4	0	5	
Antioch Col.	2	2	2	1			0			
Ashland Col.	0	1	0	0			0			
Baldwin-Wallace Col.	1	1	2	2			1			
*Bowling Green State U.	4	6	7	12	10	5	3	0	5	
Capital U.	0	0	0	0			1			
**Case Western Reserve U.	25	20	1	15	42	10	11	2	5	2
**Cincinnati-U. of	10	10	10	12	57	14	10	4	3	4
*Cleveland State U.	15	15	12	3	20	12	5	0	0	
*Dayton-U. of	9	10	7	8	0	0	4	0	0	
Denison U.	3	6	9	9			7			
Heidelberg Col.	2	2	3	2			1			
Hiram Col.	5	3	1	3			4			
*John Carroll U.	20	15	9	4	6	2	11	1	0	
**Kent State U.	18	20	16	10	52	13	15	10	2	5
Kenyon Col.	17	10	13	8			10			
*Miami U.	52	47	27	29	10	2	30	2	4	
Mount Union Col.	10	6	3	3			3			

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OHIO (cont'd)										
Oberlin Col.	15	15	10	15			15			
OH Northern U.	(0)	(0)	(0)	(0)			(1)			
**OH State U.	(30)	(25)	25	27	138	37	16	21	5	17
**OH U.	8	8	11	5	53	11	14	6	1	2
OH Wesleyan U.	10	10	9	6			4			
Otterbein Col.	3	2	0	2			0			
**Toledo-U. of	31	11	5	9	24	9	3	1	3	0
Wittenberg U.	10	6	5	4			6			
Wooster- The Col. of	10	7	4	4			2			
*Wright State U.	10	7	3	11	12	4	4	0	1	
Xavier U.	14	10	12	7			5			
Youngstown State U.	10	10	2	1			2			
OKLAHOMA										
Bethany Nazarene Col.	(3)	(3)	(2)	(1)			2			
Cameron U.	4	4	4	1			4			
*Central State U.	2	7	8	10	20	7	12	0	8	
East Central OK State U.	(2)	(2)	(2)	(3)			(2)			
Northeastern OK State U.	10	20	13	10			6			
Northwestern OK State U.	0	0	0	0			0			
OK City U.	1	3	3	8			8			
**OK State U.	7	12	12	20	30	5	10	4	1	2
**OK-U. of	9	3	9	17	60	8	5	0	0	3
Phillips U.	(2)	(3)	(2)	(2)			(2)			
Southeastern OK State U.	0	0	5	5			2			
Southwestern OK State U.	(15)	(15)	(12)	(8)			(5)			
Tulsa-U. of	5	5	5	4			0			
OREGON							/			
Eastern OR State Col.	4	8	6	9			1			
Lewis & Clark Col.	8	5	4	4			3			
Linfield Col.	(2)	(3)	(1)	(1)			(2)			
1**OR Graduate Center	-	-	-	-	22	9	-	0	0	2
**OR State U.	23	14	13	9	43	20	10	2	1	2
**OR-U. of	11	11	20	18	106	30	16	6	4	4
Pacific U.	4	3	4	3			2			
**Portland State U.	5	4	7	3	13	5	8	0	2	0
Portland-U. of	4	2	2	0			1			
Reed Col.	30	30	19	26			24			
Southern OR State U.	4	4	6	6			7			
Willamette U.	(10)	(8)	(7)	(6)			(6)			
PENNSYLVANIA										
Albright Col.	0	1	4	2			4			
Allegheny Col.	(8)	(8)	8	7			4			

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PENNSYLVANIA (cont'd)										
Bloomsburg State Col.	7	3	2	4			2			
**Bryn Mawr Col.	10	9	5	6	6	3	9	-	-	1
Bucknell U.	10	7	4	8			5			
CA State Col.of PA	(2)	(2)	(2)	(1)			(1)			
**Carnegie-Mellon U.	40	22	22	25	65	15	20	12	2	4
Clarion State Col.	5	11	9	3			6			
Dickinson Col.	5	5	6	4			13			
**Drexel U.	20	18	15	11	44	12	12	4	4	0
Duquesne U.	5	3	4	2			4			
East Stroudsburg State Col	(4)	(4)	(3)	(3)			(2)			
Edinboro U. of PA	5	8	9	1			5			
Elizabethtown Col.	(1)	(1)	(2)	(0)			3			
Franklin & Marshall Col.	15	15	16	16			15			
Gannon U.	1	1	1	4			5			
Geneva Col.	2	0	0	1			1			
Gettysburg Col.	5	6	6	6			9			
Grove City Col.	4	3	7	2			6			
Haverford Col.	10	10	8	15			7			
IN U. of PA	6	12	15	7			7			
Juniata Col.	0	5	1	4			3			
King's Col.	2	1	0	1			0			
Kutztown State Col.	(12)	(12)	(0)	(0)			(1)			
Lafayette Col.	6	2	5	2			1			
La Salle Col.	(4)	(4)	(2)	(3)			(3)			
Lebanon Valley Col.	7	7	3	4			9			
**Lehigh U.	15	11	12	12	33	4	8	5	-	4
Lincoln U.	2	3	2	2			5			
Lock Haven State Col.	2	3	0	2			0			
Lycoming Col.	8	8	4	9			2			
Mansfield U.	3	3	3	3			3			
Millersville U.	52	29	13	8			10			
Moravian Col.	20	15	5	7			3			
Muhlenberg Col.	5	5	4	6			8			
**PA State U.	29	25	26	25	100	25	11	2	3	6
**PA - U. of	0	2	6	15	108	24	9	2	4	9
**Pittsburgh - U.of	20	18	17	11	98	28	11	14	2	6
St. Joseph's U.	7	5	7	5			5			
St. Vincent Col.	1	1	2	2			0			
*Scranton - U.of	2	2	2	2	6	0	0	0	1	
Shippensburg U.	7	2	2	5			6			
Slippery Rock U.	2	3	11	0			5			
Susquehanna U.	6	3	2	1			3			
Swarthmore Col.	15	17	13	11			11			
**Temple U.	20	12	21	6	39	9	6	0	5	16
Thiel Col.	4	3	2	1			1			
Ursinus Col.	3	6	9	8			8			

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PENNSYLVANIA (cont'd)										
Villanova U.	11	2	7	5			6			
Washington & Jefferson Col	2	2	3	4			3			
West Chester U.	35	20	12	4			4			
Westminster Col.	8	12	3	1			3			
Widener U.	(2)	(2)	(2)	(3)			(0)			
*Wilkes Col.	5	1	4	1	0	0	2	1		
RHODE ISLAND										
**Brown U.	49	12	11	10	108	18	10	21	3	6
Providence Col.	2	1	2	2			2			
**RI-U. of	10	10	11	14	22	6	6	2	0	0
SOUTH CAROLINA										
Bapist Col. at Charleston	(2)	(2)	(1)	(1)			(0)			
Benedict Col.	30	20	7	5			3			
Bob Jones U.	30	6	7	3			7			
Charleston-Col. of	8	12	8	6			10			
Citadel, The	6	6	5	2			8			
**Clemson U.	8	10	3	3	20	6	4	0	3	3
Converse Col.	0	0	0	0			0			
Erskine Col.	4	3	1	0			1			
Furman U.	3	3	3	0			2			
Presbyterian Col.	8	10	3	2			5			
**SC-U. of	8	10	8	4	30	7	6	2	2	1
Wofford Col.	3	1	2	4			0			
SOUTH DAKOTA										
Augustana Col.	16	11	4	3			5			
*SD School of Mines & Tech.	7	4	7	5	6	1	2	0	1	0
*SD State U.	11	16	13	18	2	1	7	2	0	
SD-U. of	(2)	(4)	(2)	(0)			(0)			
TENNESSEE										
Austin Peay State U.	2	2	3	1			2			
Belmont Col.	5	3	3	4			1			
Carson-Newman Col.	4	2	3	0			2			
Christian Brothers Col.	2	4	2	2			1			
David Lipscomb Col.	3	3	2	0			3			
East TN State U.	3	3	3	4			3			
*Fisk U.	12	4	8	4	2	1	3	0	1	
King Col.	0	4	3	1			1			
*Memphis State U.	10	10	2	3	6	3	4	0	1	
Middle TN State U.	1	3	2	2			2			
South-U. of the	5	5	4	5			3			
Southern Missionary Col.	2	5	2	0			0			

Institution	1983-84 PHYSICS ENROLLMENTS: Undergraduate physics majors: Fresh-men	Sopho-mores	Jr's	Sr's	Graduate students f-time & p-time: Total	1st yr.	1982-83 PHYSICS DEGREES: Bach.	MS	TMS	PhD
TENNESSEE (cont'd)										
Southwestern at Memphis	5	5	5	4			3			
TN State U.	(2)	(2)	(2)	(2)			(2)			
TN Tech. U.	(3)	(3)	(2)	(4)			(4)			
TN-U. of-Chattanooga	3	10	10	2			6			
**TN-U. of-Knoxville	12	9	7	16	45	4	17	0	3	6
1**TN-U. of-Space Inst.	-	-	-	-	18	1	-	0	1	0
**Vanderbilt U.	15	10	7	8	27	7	7	2	0	2
TEXAS										
Abilene Christian U.	10	10	15	12			5			
Angelo State U.	17	10	4	8			7			
Austin Col.	4	4	1	2			4			
**Baylor U.	18	15	6	11	8	1	10	1	2	0
Dallas Baptist Col.	0	0	0	0			0			
Dallas-U. of	12	8	4	4			6			
*East TX State U.	11	10	8	7	11	4	5	2	2	
Hardin-Simmons U.	2	1	3	1			0			
Houston Baptist U.	(4)	(4)	(3)	(3)			(2)			
**Houston-U. of	25	20	12	(15)	75	15	6	2	1	6
Lamar U.	4	7	5	16			7			
McMurry Col.	2	0	1	1			1			
Midwestern State U.	(5)	(5)	(4)	(3)			(4)			
**North TX State U.	15	25	13	19	48	11	7	2	3	8
Pan American U.	6	6	4	5			2			
Prairie View A & M U.	(1)	(1)	(2)	(0)			(0)			
**Rice U.	40	30	25	19	49	9	13	7	2	3
St. Mary's U.	1	1	1	0			0			
*Sam Houston State U.	19	21	14	13	10	9	20	1	1	
Southern Methodist U.	5	2	4	4			3	0	1	
*Southwest TX State U.	14	3	6	17	6	2	4	2	1	
Southwestern U.	5	2	0	0			0			
*Stephen F. Austin State U	10	7	10	5	5	2	6	0	2	
Tarleton State U.	(1)	(1)	(1)	(0)			(0)			
TX A & I U.	5	3	4	1			1			
**TX A & M U.	25	25	30	29	65	26	13	0	5	1
**TX Christian U.	5	5	6	3	19	4	2	0	0	2
TX Southern U.	10	12	8	6			6			
**TX Tech. U.	18	20	15	10	29	6	10	3	0	1
*TX-U. of-Arlington	21	15	19	23	26	8	7	0	4	
**TX-U. of-Austin	61	55	36	26	280	52	29	1	7	15
**TX-U. of-Dallas	0	0	17	6	76	17	5	5	4	3
*TX-U. of-El Paso	11	7	4	5	21	9	7	1	5	
Trinity U.	6	3	2	2			2			
West TX State U.	(3)	(2)	(1)	(0)			(1)			

Institution	1983-84 PHYSICS ENROLLMENTS: Undergraduate physics majors: Fresh-men	Sopho-mores	Jr's	Sr's	Graduate students f-time & p-time: Total	1st yr.	1982-83 PHYSICS DEGREES: Bach.	MS	TMS	PhD
UTAH										
**Brigham Young U.	29	29	37	39	16	14	17	1	-	7
**UT State U.	15	9	4	4	25	9	3	1	-	2
**UT - U. of	26	22	24	21	76	21	15	2	14	3
Weber St. Col.	(20)	(20)	(8)	(6)			(6)			
Westminster Col.	(1)	(0)	(0)	(2)			(1)			
VERMONT										
Marlboro Col.	1	0	1	1			1			
Middlebury Col.	8	9	15	10			8			
Norwich U.	2	2	1	1			1			
St.Michael Col.	3	3	4	3			3			
*VT - U. of	23	29	17	14	11	2	8	0	1	
VIRGINIA										
Bridgewater Col.	(5)	(5)	(3)	(3)			2			
Emory & Henry Col.	3	2	2	2			2			
*George Mason U.	20	20	13	4	5	3	2	0	0	
Hampden-Sydney Col.	2	2	2	0			2			
*Hampton Institute	2	4	3	5	5	2	3	-	0	
James Madison U.	18	12	13	4			6	0	2	
Longwood Col.	39	15	9	5			7			
*Lynchburg Col.	3	6	3	8	8	1	8	1	-	
Mary Washington Col.	10	2	22	5			4			
Norfolk State Col.	8	6	4	3			2			
**Old Dominion U.	6	10	7	6	15	8	7	1	1	0
Randolph-Macon Col.	2	2	1	4			4			
Randolph-Macon Women's Col.	1	1	0	0			0			
Richmond - U. of	5	5	1	4			1			
Roanoke Col.	2	2	0	0			2			
Sweet Briar Col.	3	3	2	4			3			
VA Commonwealth U.	23	14	6	7			7			
VA Military Institute	12	8	9	7			6			
**VA Polytech Institute	47	43	47	36	46	8	12	4	3	1
*VA State U.	7	6	9	7	5	2	2	-	1	
**VA - U.of	60	40	30	24	74	18	24	0	1	9
Washington & Lee U.	18	16	16	10			12			
**William & Mary - Col.of	30	21	12	11	42	12	19	3	2	7
WASHINGTON										
Central WA U.	8	15	10	4			4			
Eastern WA U.	10	10	6	3			6			
Gonzaga U.	1	0	2	1			0			
Pacific Lutheran U.	5	5	2	3			2			
Puget Sound - U.of	(15)	(15)	(10)	(7)			(2)			
Seattle Pacific U.	4	4	3	5			4			

Institution	1983-84 PHYSICS ENROLLMENTS: Undergraduate physics majors: Fresh-men	Sopho-mores	Jr's	Sr's	Graduate students f-time & p-time: Total	1st yr.	1982-83 PHYSICS DEGREES: Bach.	MS	TMS	PhD
WASHINGTON (cont'd)										
Seattle U.	(5)	(5)	(4)	(3)			(3)			
Walla Walla Col.	5	2	0	0			0			
**WA State U.	13	5	7	13	32	14	9	3	2	0
**WA-U. of	35	35	44	37	154	35	36	5	4	10
Western WA U.	10	15	15	8			3			
Whitman Col.	36	36	29	6			18			
Whitworth Col.	(4)	(3)	(3)	(3)			(4)			
WEST VIRGINIA										
Bethany Col.	3	2	3	2			3			
Marshall U.	(3)	(2)	(2)	(3)			(3)			
WV Inst. of Tech.	2	1	0	3			0			
**WV U.	12	8	5	4	35	5	0	0	3	2
WV Wesleyan Col.	16	12	8	7			6			
Wheeling Col.	2	1	2	2			1			
WISCONSIN										
Beloit Col.	7	6	9	3			2			
Carroll Col.	(5)	(3)	(4)	(4)			(3)			
Carthage Col.	1	0	0	0			1			
Lawrence U.	8	7	5	7			5			
*Marquette U.	8	3	3	5	14	4	2	6	0	
Northland Col.	(2)	(1)	(1)	(2)			(0)			
Ripon Col.	12	6	4	5			6			
WI-U. of-Eau Claire	17	11	12	13			8			
*WI-U. of-Green Bay	6	4	4	4			3	0	1	
WI-U. of-La Crosse	(3)	(3)	(3)	(2)			(1)			
**WI-U. of-Madison	15	10	7	41	169	28	22	9	12	22
**WI-U. of-Milwaukee	8	8	6	6	37	8	3	0	5	6
*WI-U. of-Oshkosh	9	7	8	7	6	3	3	0	0	
WI-U. of-Parkside	5	5	6	3			1			
WI-U. of-Platteville	0	1	1	1			0			
WI-U. of-River Falls	10	6	7	6			5			
WI-U. of-Stevens Point	18	18	4	11			7			
WI-U. of-Superior	4	4	7	4			7			
WI-U. of-Whitewater	5	4	3	3			3			
WYOMING										
**WY-U. of	6	18	9	5	31	10	5	0	2	3

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AIP report MANPOWER STATISTICS DIVISION

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DATA ON ASTRONOMY ENROLLMENTS AND DEGREES

a SUPPLEMENT

by Susanne D. Ellis

AIP Pub. No. R-151.21B

March 1984

SUPPLEMENT

This supplement is an institutional listing of the 68 degree-granting astronomy departments in the U.S., 30 of which are combined physics and astronomy departments.

Notations used in this supplement:

- **C** Combined physics and astronomy department.
- **S** Separate astronomy department.
- ***** Institution grants master's degree as its highest astronomy degree.
- ****** Institution grants doctorate as its highest astronomy degree.
- **1** No undergraduate degree program in astronomy

MEMBER SOCIETIES:
AMERICAN PHYSICAL SOCIETY • OPTICAL SOCIETY OF AMERICA • ACOUSTICAL SOCIETY OF AMERICA • SOCIETY OF RHEOLOGY • AMERICAN ASSOCIATION OF PHYSICS TEACHERS • AMERICAN CRYSTALLOGRAPHIC ASSOCIATION • AMERICAN ASTRONOMICAL SOCIETY • AMERICAN ASSOCIATION OF PHYSICISTS IN MEDICINE • AMERICAN VACUUM SOCIETY

Institution	Type of Dept.	1983-84 ASTRONOMY ENROLLMENTS: Introductory Sci.	Introductory Nonsci.	Undergrad. Jrs.	Undergrad. Srs.	Graduate students f-time & p-time Total	Graduate students f-time & p-time 1st yr.	1982-83 ASTRONOMY DEGREES: BS	MS	TMS	PhD
ARIZONA											
**AZ-U.of	S	30	1 250	15	15	23	5	8	-	-	2
STATE TOTAL		30	1 250	15	15	23	5	8	-	-	2
CALIFORNIA											
**CA Institute of Tech.	C	19	-	2	3	14	2	3	1	-	6
**CA-U.of-Berkeley	S	92	864	4	7	24	3	8	0	0	2
**CA-U.of-Los Angeles	S	130	3 300	6	4	19	1	3	3	1	0
1**CA-U.of-Santa Cruz	S	680	-	-	-	25	8	-	-	-	1
*San Diego State U.	S	0	1 300	7	10	13	6	3	0	3	-
Southern CA-U.of	S	21	623	2	0	-	-	0	-	-	-
STATE TOTAL		942	6 087	21	24	95	20	17	4	4	9
COLORADO											
1**CO-U.of-Boulder (Astro-Geophysics)	S	-	1 359	-	-	50	5	-	3	3	5
STATE TOTAL		-	1 359	-	-	50	5	-	3	3	5
CONNECTICUT											
*Wesleyan U.	S	20	100	2	2	0	0	2	2	0	
**Yale U.	S	45	194	1	0	13	4	0	1	-	2
STATE TOTAL		65	294	3	2	13	4	2	3	0	2
DELAWARE											
DE-U.of	C	8	500	1	0	3	1	0	1	-	-
STATE TOTAL		8	500	1	0	3	1	0	1	-	-
DISTRICT OF COLUMBIA											
Howard U.	C	33	22	2	0	0	0	0	-	-	0
STATE TOTAL		33	22	2	0	0	0	0	-	-	0
FLORIDA											
**FL-U.of-Gainesville	S	40	2 900	5	4	27	7	2	2	0	1
STATE TOTAL		40	2 900	5	4	27	7	2	2	0	1
GEORGIA											
Agnes Scott Col.	C	0	20	1	3	-	-	0	-	-	-

Institution	Type of Dept.	1983-84 ASTRONOMY ENROLLMENTS Introductory Sci.	Introductory Nonsci.	Undergrad. Jrs.	Undergrad. Srs.	Graduate students f-time & p-time Total	1982-83 ASTRONOMY DEGREES 1st yr.	BS	MS	TMS	PhD
GEORGIA (cont'd)											
*GA-U.of	C	-	185	4	2	1	1	1	-	-	-
Valdosta State Col.	C	8	81	2	3	-	-	3	-	-	-
STATE TOTAL		8	295	7	8	1	1	4	-	-	-
HAWAII											
1**Hawaii-U.of	C	-	952	-	-	24	5	-	3	-	2
STATE TOTAL		-	952	-	-	24	5	-	3	-	2
ILLINOIS											
1**Chicago-U.of	S	10	180	-	-	18	8	-	0	0	1
**IL-U.of-Urbana	S	248	475	8	9	17	5	4	1	-	5
**Northwestern U.	C	30	500	3	1	3	2	1	2	1	1
STATE TOTAL		288	1 155	11	10	38	15	5	3	1	7
INDIANA											
1**IN-U.of-Bloomington	S	48	1 081	12	6	17	5	3	2	2	1
STATE TOTAL		48	1 081	12	6	17	5	3	2	2	1
IOWA											
1**IA State U.	C	19	-	-	-	8	3	-	0	2	2
**IA-U.of	C	162	851	5	1	14	6	5	0	-	0
STATE TOTAL		181	851	5	1	22	9	5	0	2	2
KANSAS											
KS-U.of	C	0	342	3	0	-	-	4	-	-	-
STATE TOTAL		0	342	3	0	-	-	4	-	-	-
KENTUCKY											
KY-U.of	C	0	735	2	1	-	-	0	-	-	-
STATE TOTAL		0	735	2	1	-	-	0	-	-	-
MARYLAND											
**MD-U.of	S	65	1 000	10	5	31	6	4	2	2	2
STATE TOTAL		65	1 000	10	5	31	6	4	2	2	2

Institution	Type of Dept.	1983-84 ASTRONOMY ENROLLMENTS: Introductory Sci.	Introductory Nonsci.	Undergrad. Jrs.	Undergrad. Srs.	Graduate students f-time & p-time Total	Graduate students f-time & p-time 1st yr.	1982-83 ASTRONOMY DEGREES: BS	MS	TMS	PhD
MASSACHUSETTS											
**Boston U.	S	30	700	5	5	8	0	4	2	0	0
**Harvard U.	S	20	387	4	2	25	6	0	1	-	6
**MA-U.of-(5-Col.Astronomy)	S	81	1 062	13	15	27	7	10	0	0	5
Wellesley Col.	S	22	160	5	5	-	-	4	-	-	-
Williams Col.	C	22	40	3	4	-	-	2	-	-	-
STATE TOTAL		175	2 349	30	31	60	13	20	3	0	11
MICHIGAN											
MI State U.	C	92	456	7	7	-	-	3	-	-	-
**MI-U.of	S	123	1 230	1	5	10	3	2	1	0	3
STATE TOTAL		215	1 686	8	12	10	3	5	1	0	3
MINNESOTA											
Mankato State U.	C	-	200	2	2	-	-	1	-	-	-
**MN-U.of	S	95	3 000	1	4	10	2	0	0	1	0
STATE TOTAL		95	3 200	3	6	10	2	1	0	1	0
MISSOURI											
**MO-U.of-Columbia	C	4	400	0	0	0	0	0	0	0	1
STATE TOTAL		4	400	0	0	0	0	0	0	0	1
NEBRASKA											
NE-U.of-Lincoln	C	121	306	0	1	3	0	0	0	0	0
STATE TOTAL		121	306	0	1	3	0	0	0	0	0
NEW JERSEY											
**Princeton U.	S	-	247	0	5	11	2	2	-	-	3
STATE TOTAL		-	247	0	5	11	2	2	-	-	3
NEW MEXICO											
**NM State U.	S	-	528	0	0	18	2	0	4	0	1
NM-U.of	C	54	396	7	8	-	-	3	-	-	-
STATE TOTAL		54	924	7	8	18	2	3	4	0	1

Institution	Type of Dept.	1983-84 ASTRONOMY ENROLLMENTS: Introductory Sci.	Introductory Nonsci.	Undergrad. Jrs.	Undergrad. Srs.	Graduate students f-time & p-time Total	Graduate students 1st yr.	1982-83 ASTRONOMY DEGREES: BS	MS	TMS	PhD
NEW YORK											
**Columbia U.	S	33	187	2	2	13	3	1	5	1	1
1**Cornell U.	S	-	370	-	-	21	4	-	5	-	1
**Rochester-U.of	C	26	29	1	6	5	1	6	-	1	2
**SUNY-Stony Brook (Earth & Space Sciences)	S	51	874	6	3	13	5	3	0	1	2
Vassar Col.	C	18	125	1	0	-	-	2	-	-	-
STATE TOTAL		128	1 585	10	11	52	13	12	10	3	6
OHIO											
**Case Western Reserve U.	S	7	72	1	2	2	-	0	0	-	0
Mount Union Col.	C	-	33	0	0	-	-	1	-	-	-
**OH State U.	S	52	1 994	4	4	14	3	1	0	0	1
Youngstown State U.	C	35	1 000	2	0	-	-	0	-	-	-
STATE TOTAL		94	3 099	7	6	16	3	2	0	0	1
OKLAHOMA											
**OK-U.of	C	27	-	0	1	3	1	0	0	0	0
STATE TOTAL		27	-	0	1	3	1	0	0	0	0
PENNSYLVANIA											
Haverford Col.	S	36	98	4	2	-	-	1	-	-	-
Lycoming Col.	C	6	82	0	1	-	-	1	-	-	-
**PA State U.	S	180	2 400	12	10	14	4	8	1	3	4
**PA-U.of	S	108	324	4	3	10	1	3	0	0	2
**Pittsburgh-U.of	C	0	0	0	0	1	0	0	-	-	2
*Swarthmore Col.	S	5	54	2	1	-	-	3	-	-	-
Villanova U.	S	16	200	2	4	-	-	4	-	-	-
STATE TOTAL		351	3 158	24	21	25	5	20	1	3	8
SOUTH CAROLINA											
**Clemson U.	C	84	325	0	0	4	0	0	0	0	0
STATE TOTAL		84	325	0	0	4	0	0	0	0	0
TENNESSEE											
*Vanderbilt U.	C	35	72	4	2	4	2	0	0	0	-
STATE TOTAL		35	72	4	2	4	2	0	0	0	-

Institution	Type of Dept.	1983-84 ASTRONOMY ENROLLMENTS Introductory Sci.	Introductory Nonsci.	Undergrad. Jrs.	Undergrad. Srs.	Graduate students f-time & p-time Total	Graduate students f-time & p-time 1st yr.	1982-83 ASTRONOMY DEGREES BS	MS	TMS	PhD
TEXAS											
**Rice U.-Space Physics	S	30	30	9	4	32	4	4	4	0	3
**TX-U.of-Austin	S	90	2 391	26	11	43	8	1	9	1	6
STATE TOTAL		120	2 421	35	15	75	12	5	13	1	9
UTAH											
**Brigham Young U.	C	10	214	-	-	1	1	-	-	-	1
STATE TOTAL		10	214	-	-	1	1	-	-	-	1
VERMONT											
Marlboro Col.	C	-	16	0	1	-	-	0	-	-	-
STATE TOTAL		-	16	0	1	-	-	0	-	-	-
VIRGINIA											
**VA-U.of	S	25	700	7	8	19	8	3	2	-	1
STATE TOTAL		25	700	7	8	19	8	3	2	-	1
WASHINGTON											
**WA-U.of	S	60	950	3	2	19	1	3	2	0	2
Whitman Col.	S	14	72	3	1	-	-	3	-	-	-
STATE TOTAL		74	1 022	6	3	19	1	6	2	0	2
WISCONSIN											
**WI-U.of-Madison	S	25	452	2	8	14	3	4	2	-	1
STATE TOTAL		25	452	2	8	14	3	4	2	-	1
WYOMING											
WY-U.of	C	-	230	2	2	-	-	1	-	-	-
STATE TOTAL		-	230	2	2	-	-	1	-	-	-
U.S. TOTAL		3 345	41 229	242	217	688	154	138	61	22	81